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MEMORANDUM

To: Transportation Committee

Date: December 30, 2009

From: Ross Patronsky, Senior Planner

Re: Major Transportation Capital Projects – Status Update

Overall status and role within GO TO 2040

The *GO TO 2040* plan will include a financially constrained list of major capital projects, as required by federal regulations. Since there is insufficient funding available to pursue all potentially beneficial projects, project prioritization is necessary. It is expected that *GO TO 2040* will include projects in three categories:

- Projects that are *fiscally constrained*, meaning that their costs can be covered within the
 region's expected transportation revenue. This is the highest priority category of major
 capital projects.
- Projects that are beneficial and supported by the plan, but that are *fiscally unconstrained*. These are projects that have significant regional benefits and support for their implementation, but do not have identified revenues. If additional revenues for these projects are identified, they can be moved to the fiscally constrained category.
- Projects that are the lowest priority or likely to be constructed beyond the plan's 2040 horizon. These may be used for *future corridors* and corridor preservation activities may still be appropriate but the projects will not be recommended within the plan.

By federal regulations, major capital projects may not receive design approval unless they are included in the fiscally constrained project list. Implementers may initiate preliminary engineering, feasibility studies, or other preliminary work regardless of how they are treated within *GO TO 2040*. CMAP encourages sponsors of projects that are on both the constrained and the unconstrained list to undertake these preliminary activities, as they lead to better understanding of the projects and allow them to be prioritized based on more complete information.

Regional planning is a continuous process which responds to changing circumstances. Priorities change over time, and the priorities expressed in *GO TO 2040* are not expected to remain unchanged over the plan's timeframe. The long-range plan is updated every four years, and this

provides an opportunity to reassign projects to different categories in response to changes in funding situations or priorities. Even outside of these update opportunities, the plan can be modified at any point by the MPO Policy Committee and CMAP Board. However, changes between plan updates should not be made casually; they should be reserved for rare circumstances that could not be foreseen. CMAP believes that to the best of our abilities, the project categories should truly reflect the region's priorities.

Evaluation status

Initial evaluations have been conducted for all of the major capital projects that have potential to be included in the fiscally constrained project list. Several projects were submitted for consideration but have been judged by staff to not be appropriate for inclusion within the fiscal constraint. These are generally projects for which a project "sponsor" – i.e., the agency that would build the project – could not be identified or the information on the project is insufficient to support an evaluation. A list of these is attached (Attachment 1). Evaluations of these projects can be conducted if requested by the Transportation Committee.

Results for the projects that have been evaluated are included as a separate document. Note that these are high-level informational results produced using a regional model, and ranking projects based solely on these results is not recommended. Committee members should use caution in comparing projects, as small differences between them are likely not significant. In addition, any recommended project will require additional detailed study prior to implementation. Project-level studies produce different results, appropriate to the level of detailed needed for implementation. The results in this evaluation are intended to provide only a general idea of comparative benefits.

Evaluation measure descriptions

A descriptions of how each evaluation measure is calculated is included below. This also provides some discussion of the interpretation of each measure. Note that some minor changes have been made to the measures since they were last presented to the Transportation Committee. Specifically, some measures that apply to highway projects only (such as congestion on that particular facility) have been calculated in a more useful way. This has affected the specific calculation of that measure, not the concept that is being measured.

- Long-Term Economic Development the long-term economic impacts of the project, not including construction impacts. To ensure consistency in the evaluations, all projects are presumed to be completed in 2017; this allows sufficient time for the model to stabilize. Three measures are included jobs, wage income and gross regional product. Please note that there are many ways to measure jobs, and the job figures reported here may not be directly comparable to projections from other sources. However, the relative changes among projects within this evaluation are meaningful.
- Average Speed (highway facility) the change in speed on the highway being improved is reported. For new facilities, the "before" speed is zero, so new facilities show more

- speed improvement than existing facilities. This value is reported only for highway projects, and is in lieu of hours of congestion, which depends in part on the scale of the facility.
- Congestion (regional) as measured by the travel demand model, the number of vehicle hours of travel under congested conditions (the volume/capacity ratio is greater than one) on the full transportation network.
- Work Travel Times average travel times for home-based work trips throughout the region by mode. The savings are estimated for both highway and transit trips.
- Mode Share the number of trips on an average weekday made by auto and transit.
- Jobs-Housing Access the average number of jobs accessible to individuals in the region within a specified time (45 minutes for highway travel, 75 minutes for transit travel). The accessibility measure is a regional weighted average of the number of jobs that can be reached from each CMAP traffic analysis zone within the specified times by each mode. Since this is a regional measure, the accessibility of any one part of the region may differ from the overall average.
- Air Quality the number of tons of criteria pollutants or precursors emitted by highway vehicles. On a daily basis, volatile organic compounds and nitrogen oxides are measured they are the precursors to ground-level ozone. On an annual basis, direct particulate emissions and nitrogen oxides are measured these are the primary contributors to fine particulate matter pollution.
- Energy Consumption and Greenhouse Gas Emissions annual tons of carbon dioxide equivalent gases, based on vehicle-miles of travel and the average emissions per vehicle.
- Preservation of Natural Resources the number of trip generation zones (generally survey quarter sections, .5 mi x .5 mi) impacted by the project that contain concentrations of unprotected natural areas with high environmental value, high-quality streams or prime agricultural lands. Please note that only unprotected lands are included in this measure; any impact the project would have on protected lands such as parks or forest preserves would be addressed during the NEPA process. Since this measure is specific to a project, no comparison is made to the reference scenario. In addition, the percentage of impacted subzones that have concentrations of unprotected resources is also calculated.
- Support for Infill Development the number of subzones impacted by the project that are primarily within (or in many cases, immediately adjacent to) municipal boundaries. This measure indicates that the project is likely to create pressure for growth in these communities. Whether this has a positive or negative effect from a community perspective depends on the specifics of project design and also land use planning to accommodate the expected development. Since this measure is specific to a project, no comparison is made to the reference scenario. In addition, the percentage of impacted subzones that are within municipal boundaries is also calculated.
- Facility Condition the most current Condition Rating System score is reported for highway projects. For transit facilities, CMAP staff continues to work with RTA staff to develop condition assessments.
- Peak Period Utilization this highway measure consists of two parts, one the peak volume of traffic on the facility before and after the project is completed, and second the capacity of the facility before and after the project is completed. This indicates in a

straightforward way whether the project provides adequate increased capacity to handle the demand. The before measures can also be used to assess whether or not there is a capacity constraint on a facility that merits adding capacity.

Two of the above measures, preservation of natural resources and support for infill development, rely on identifying "impacted subzones." These areas include those within one mile of an access point, including interchanges or stations, as well as those that produce 50 or more trips which use the capital project. These subzones are considered to be "impacted" by the project, in that the project creates greater accessibility and is likely to induce new development or reinvestment in these areas.

Measures with qualitative impacts are summarized in the narrative section of the project evaluation; many of these measures continue to be updated as discussions with project sponsors identify more impacts. Not all impacts are included in every narrative. These include:

- Safety features a description of how the project will address existing deficiencies or incorporate new features to improve safety.
- Security features a description how the project will contribute to transportation security.
- Provision of bicycle and pedestrian facilities a description of the project's accommodations to and support of bicycle and pedestrian travel.
- Consistency between regional and sub-regional plans, including municipal and county plans project sponsors have been asked to describe the consistency of their projects with the plans of local governments in the project area, and CMAP staff have reviewed county and municipal plans to determine whether they reference a particular project.

Schedule

Through the remainder of January and February, staff will continue to refine the project evaluations, working with project sponsors to ensure that our understanding of projects is up to date. Work on the financial plan and fiscal constraint development will also continue during this time.

At the March meeting of the Transportation committee, staff expects to have a preliminary staff recommendation for the overall fiscal constraint and the assignment of capital projects into constrained, unconstrained, and future corridor lists. This will be a preliminary recommendation intended for discussion purposes. It will be revised if necessary based on Transportation committee discussion.

From late March to early May, comments from stakeholders will be sought on the preliminary recommendation. The Transportation committee will be briefed on the results to date at their April meeting.

In May, the Transportation committee will be requested to recommend the endorsement of the categorization of major capital projects into constrained, unconstrained, and future corridor lists.

The MPO Policy Committee and CMAP Board are expected to be asked for endorsement at their June meetings.

ACTION REQUESTED: Discussion.

Attachment 1 Projects Not Evaluated

- Illinois Rail Net Corridor: This proposal recommends a light rail or bus rapid transit system in Kendall County.
- Illinois Transit System and Spider 10 Hwy System: This proposal features several elements. One is to develop a monorail transit system to replace the existing CTA rapid transit facilities. The second is to develop a "Spider 10" connective highway system to lead to all major arteries and highways.
- Limited Stop Airport Train Service: The Limited Stop Airport Train Service proposes airport express train service with a select number of midstream station facilities along the existing CTA Blue and Orange Lines. The Jefferson Park and Logan Square Blue Line stations are envisioned as the first two midstream stations.
- Monorail System: This proposal calls for developing a monorail system across the NE Illinois region utilizing existing transportation facility ROWs where feasible. The multipurpose non motorized Great Western Trail and Illinois Prairie Path in the western suburbs have been proposed as initial routes.
- O'Hare Direct High Speed Rail Service Network: This proposal calls for establishing a
 network of express commuter trains linking O'Hare with Union Station and intermodal
 centers with remote parking lots in Barrington, Deerfield, Naperville and Homewood.
- Rainbow Line: This proposal calls for establishing new rapid transit lines within the City of Chicago Boulevard System right-of-ways. The name of the proposal is inspired by the rainbow-like imprint of the main boulevard system. Two additional east-west branches, each roughly paralleling 95th Street and Lawrence Avenue respectively would be built in order to maximize connectivity with other rapid transit and commuter rail lines.
- Reason Foundation Project: A network of High-Occupancy Toll (HOT) expressways that includes both existing and new corridors has been proposed for the Chicago region. The key design feature of this proposal is tunneling or underground placement of new HOT, or congestion priced, lanes as a means of addressing concerns about aesthetics, noise, and property value concerns.
- Transportation for the Future Now: This proposal calls for the implementation of an Electronic Mechanical Highway. This type of facility will incorporate automated vehicle guidance (AVG) and other advanced technologies to propel both specially designed new vehicles or retrofitted older vehicles in motion with little congestion-causing friction or conflict.

Projects Initially Listed but Since Removed

- **Prairie Parkway Southeast Extension**: This proposal called for extending the Prairie Parkway corridor from its junction with I-80 in Minooka southeast to I-57. It has been incorporated into the Illiana Corridor.
- **South Suburban Corridor**: The proposal extended from the proposed I-355 south extension to I-80 east to I-57 in order to connect to the proposed I-57/IL394 Connector. It has been incorporated into the Illiana Corridor.
- **I-57 to IL 394 Connector**: The proposal was to extend the proposed South Suburban Corridor from its proposed terminus at I-57 east to IL 394 in the vicinity of the proposed South Suburban Airport. It has been incorporated into the Illiana Corridor.
- **Illiana Corridor Extension**: This proposal to extend the Illiana Expressway from I-55 to IL 394 has been incorporated into the Illiana Corridor project, including the Illiana Expressway.
- McHenry Co Extension of Prairie Parkway: This proposal called for extension of the Prairie Parkway corridor north from the Kane County Line – roughly I-90- up to the Illinois Wisconsin border. It is currently not being pursued.
- **BNSF Montgomery Extension**: This extension of the Burlington Northern Santa Fe line from Montgomery to Aurora is superseded by a proposed extension to Oswego/Plano.
- **BNSF Sugar Grove Extension**: This extension of the Burlington Northern Santa Fe line from Sugar Grove to Aurora is superseded by a proposed extension to Oswego/Plano.
- **UP-NW Extension to Richmond**: This extension of the Union Pacific Northwest line from McHenry to is now being extended to Johnsburg.
- CCP RR Service from Burlington: This proposal called for implementing commuter rail service from Burlington IL (NW Kane County) along the CCP RR right-of-way. It is currently not being pursued.
- **Circle Line**: The Circle Line was composed of new strategic links to Chicago's rapid transit system located in a ring about two to three miles from the Chicago Central Business District. The project has been divided into two parts, the Circle Line North and the Circle Line South.
- **Gold Line**: The Gold Line proposal called for an improved rail service line operating alongside the current Metra Electric mainline from Millennium Station to 63rd Street, and then utilizing the current Metra Electric South Chicago Branch ROW up to 93rd Street. It is incorporated into the South Lakefront Corridor proposal.
- Gray Line LRT: This proposal, to operate a rapid transit line on the current Metra Electric
 mainline and Metra Electric South Chicago Branch between Millennium Station and South
 Chicago-93rd Street, is incorporated into the South Lakefront Corridor proposal.
- **Green Line Enhancements**: this proposal included increasing the number of stations on the Green Line while maintaining or improving transit service levels. The scope of the project is such that it is not a major capital project using the definition in *GO TO 2040*.
- **Tollway Transit System**: This proposal for additional Exclusive Bus Lane/Service on I-294 and I-90 is not a major capital project using the definition in *GO TO 2040*.
- Cicero Avenue Bus Rapid Transit: This proposal for a Bus Rapid Transit service from Jefferson Park Blue Line Station to Ford City is not a major capital project using the definition in GO TO 2040.

- **South Shore Commuter Rail Extension**: This extension of the South Shore Railroad to Lowell, IN is not within the region covered by *GO TO 2040*.
- **I-294 Add Lanes South**: This project to add lanes to I-294 from 95th Street to IL 394 is completed.